AMENDMENTS TO THE CLAIMS

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An implant for implantation on a femoral condyle, the implant comprising:

a bone-facing implant surface and joint-facing implant surface; wherein the bone-facing implant surface is configured to oppose[[s]] at least a portion of the femoral condyle and the trochlea, and the joint-facing implant surface is configured to provide an articular surface when the implant is implanted on the femoral condyle ~~opposes at least a portion of a tibial surface and a patella~~; and further wherein at least a portion of the bone-facing implant surface has a three-dimensional shape that is configured to substantially match ~~matches~~ the shape of at least a portion of an uncut articular surface of the femoral condyle and to abut the portion when the implant is implanted on the femoral condyle ~~that the bone-facing surface of the implant abuts~~.

2. (Cancelled)

3. (Original) The implant of claim 1 wherein the implant has a thickness of a cartilage defect in a patient.

4. (Original) The implant of claim 1 wherein the implant has a thickness of 85% of a cartilage defect in a patient.

5. (Original) The implant of claim 1 wherein the implant has a thickness of between 65%-100% of a cartilage defect of a patient.

6. (Original) The implant of claim 1 wherein the implant has a thickness of a cartilage defect plus a predefined offset value.

7. (Original) The implant of claim 6, wherein said offset value can be selected to adjust for axis malalignment.

8. (Original) The implant of claim 1 wherein the implant is constructed of a material comprising metal or metal alloy.

9. (Original) The implant of claim 1 wherein the material comprises one or more biologically active materials.

10. (Original) The implant of claim 6 wherein the implant is coated with a biologically active material.

11. (Original) The implant of claim 1 wherein the implant is comprised of a metal or metal alloy and a polymer.

12. (Previously Presented) The implant of claim 1 further having a structure for attachment on at least one of the bone-facing surface and the joint-facing surface selected from the group consisting of: ridges, pegs, pins, cross-members, teeth and protrusions.

13. (Original) The implant of claim 12 further having a plurality of structures for attachment.

14. (Original) The implant of claim 13 wherein the relative orientation of the structures for attachment are selected from the group consisting of: symmetrical, asymmetrical, rows, circles, triangles, and random.

15. (Previously Presented) The implant of claim 1 wherein a second component of the implant covers a portion of a patellar surface.

16. (Previously Presented) The implant of claim 1 wherein each of the bone-facing surface and joint-facing surfaces have a slope relative to a longitudinal axis through at least a portion of the implant and further wherein the slope of the bone-facing surface relative to the slope of the joint-facing surface is selected from the group consisting of: positive, negative, and null.

17. (Previously Presented) The implant of claim 1 wherein the external surface of the implant approximates the shape of one of the condylar, trochlear, tibial or patellar articular surfaces.

18. (Previously Presented) The implant of claim 1 wherein a condyle mating surface of the implant has at least one plane surface for mating with a prepared condyle having a cut.

19. (Original) The implant of claim 1 wherein the implant is selected from a library of implants.

20. (Original) The implant of claim 1 wherein the implant is surgically implanted via an incision of 10 cm or less.

21. (Original) The implant of claim 1 wherein the implant is surgically implanted via an incision of 6 cm or less.

22. (Original) The implant of claim 1 wherein the range of motion of the joint is restored to between 80-99.9% of normal joint motion.

23. (Original) The implant of claim 1 wherein the range of motion of the joint is restored to between 90-99.9% of normal joint motion.

24. (Original) The implant of claim 1 wherein the range of motion of the joint is restored to between 95-99.9% of normal joint motion.

25. (Original) The implant of claim 1 wherein the range of motion of the joint is restored to between 98-99.9% of normal joint motion.

26. (Original) The implant of claim 1 wherein the implant is formed to oppose at least a portion of a second condyle on the femur.

27. (Currently Amended) A kit for repairing a knee, the kit comprising:

a. a femoral condyle implant comprising a bone-facing femoral implant surface and a joint-facing femoral implant surface; wherein the bone-facing femoral implant surface is configured to oppose at least a portion of the femoral

condyle and the trochlea, and the joint-facing implant surface is configured to provide an articular surface when the implant is implanted on the femoral condyle ~~opposes at least a portion of the femoral condyle and the trochlea, and the joint-facing femoral implant surface opposes at least a portion of a tibial surface and a patella~~; and further wherein at least a portion of the bone-facing implant surface has a three-dimensional shape that is configured to substantially match ~~matches~~ the shape of at least a portion of an uncut articular surface and to lie adjacent to the portion when the implant is implanted on the femoral condyle ~~that the bone-facing surface of the implant abuts~~; and

b. a patellar implant comprising a first surface configured to engage ~~that engages~~ the ~~femur mating surface of the patella~~ joint-facing implant surface and a second surface configured to engage ~~that engages~~ the patella.

28. (Currently Amended) An implant for implantation on a femoral condyle, the implant comprising:

a bone-facing implant surface; and

a joint-facing implant surface, wherein the bone-facing implant surface is configured to oppose ~~opposes~~ at least a portion of at least one or more femoral condyles and the trochlea when the implant is implanted on a femoral condyle, and wherein the joint-facing implant surface is configured to oppose ~~opposes~~ at least a portion of a weight-bearing ~~portion of a~~ tibial surface and a patella when the implant is implanted on a femoral condyle, and further wherein at least a portion of the bone-facing implant surface has a three dimensional shape configured to ~~that~~ substantially match ~~matches~~ the shape of an uncut articular surface that the implant abuts when the implant is implanted on the femoral condyle.

29. (Previously Presented) The implant of claim 28, wherein at least a portion of the joint-facing surface of the implant has a three-dimensional shape that substantially matches the surface of an opposing tibial implant component.

30. (Previously Presented) The implant of claim 28, wherein at least a portion of the joint facing surface of the implant has a three-dimensional shape that substantially matches the shape of at least one of the articular surface that the bone-facing surface of the implant abuts and the joint-facing surface of the implant abuts.

31. (Currently Amended) An implant for implantation on a femoral condyle, the implant comprising:

a bone-facing implant surface; and

a joint-facing implant surface, wherein the bone-facing implant surface is configured to oppose ~~opposes~~ at least a portion of the femoral condyle and the trochlea when the implant is implanted on the femoral condyle, and the joint-facing implant surface is configured to provide an articular surface when the implant is implanted on the femoral condyle ~~opposes at least a portion of a tibial surface and a patella~~, and further wherein at least a portion of the joint-facing implant surface has a three-dimensional shape that is configured to substantially match ~~matches~~ the shape of at least part of an uncut surface of the portion of the femoral condyle opposed by at least a portion of the bone-facing surface of the implant ~~of the uncut articular surface that the bone-facing surface of the implant abuts~~.

32. (Previously Presented) The implant of claim 31, wherein the implant has a thickness of a cartilage defect plus a predefined offset value.

33. (Previously Presented) The implant of claim 32, wherein said offset value can be selected to adjust for axis malalignment.

34. (Previously Presented) The implant of claim 31, wherein the implant is constructed of a material comprising metal or metal alloy.

35. (Previously Presented) The implant of claim 31, further having a structure for attachment on at least one of the bone-facing surface and the joint-facing surface selected from the group consisting of: ridges, pegs, pins, cross-members, teeth and protrusions.

36. (Previously Presented) The implant of claim 31, wherein the implant has a thickness similar to normal cartilage.

37. (Previously Presented) The implant of claim 31, wherein the implant has a thickness that is constant across the implant.

38. (Previously Presented) The implant of claim 31, wherein the implant has a thickness that varies across the implant.

39. (Currently Amended) An implant for implantation on a femoral condyle, the implant comprising:

a bone-facing implant surface; and

a joint-facing implant surface, wherein the bone-facing implant surface is configured to oppose ~~opposes~~ at least a portion of the femoral condyle and the trochlea when the implant is implanted on the femoral condyle, and the joint-facing implant surface is configured to provide an articular surface when the implant is implanted on the femoral condyle ~~opposes at least a portion of a tibial surface and a patella~~, and further wherein at least a portion of both the bone-facing and the joint-facing implant surface has a three-dimensional shape that is configured to substantially match ~~matches~~ the shape of at least a portion of an ~~the~~ uncut articular surface of the femoral condyle ~~that the bone-facing surface of the implant abuts~~.

40. (Previously Presented) The implant of claim 1, wherein at least a portion of both the bone-facing and the joint-facing implant surface has a three-dimensional shape that substantially matches the shape of at least a portion of an uncut articular surface that the bone-facing surface of the implant abuts.

41. (Previously Presented) The implant of claim 1, wherein at least a portion of the joint-facing implant surface has a three-dimensional shape that substantially matches the shape of at least a portion of an uncut articular surface that the bone-facing surface of the implant abuts.

42. (Previously Presented) The implant of claim 1, wherein at least a portion of the joint facing implant surface has a three-dimensional shape that substantially mimicks the shape of a normal articular cartilage surface.

43. (Previously Presented) The implant of claim 1, wherein the distance between the bone facing and the joint facing implant surface is constant.

44. (Previously Presented) The implant of claim 43, wherein said distance between the bone facing and the joint facing implant surface is similar to the thickness of articular cartilage.

45. (Previously Presented) The implant of claim 1, wherein the distance between the bone facing and the joint facing implant surface is variable.

46. (Previously Presented) The implant of claim 45, wherein the distance between the bone facing and the joint facing implant surface is similar to the thickness of articular cartilage.

47. (New) An implant for implantation on a femoral condyle, the implant comprising:

a bone-facing implant surface and joint-facing implant surface; wherein the bone-facing implant surface is configured to oppose at least a portion of a femoral condyle and the trochlea, and the joint-facing implant surface is configured to provide an articular surface when the implant is implanted on the femoral condyle; and further wherein at least a first portion of the bone-facing implant surface has a three-dimensional shape that is configured to substantially match the shape of at least a portion of an uncut articular surface of the femoral condyle that the implant abuts when the implant is implanted on the femoral condyle and at least a second portion of the bone facing implant is configured to

substantially match the shape of at least a portion of a cut surface that the implant abuts when the implant is implanted on the femoral condyle.

48. (New) An implant for implantation on a femoral condyle, the implant comprising:

a bone-facing implant surface; and

a joint-facing implant surface, wherein the bone-facing implant surface is configured to oppose at least a portion of at least one or more femoral condyles and the trochlea when the implant is implanted on a femoral condyle, and wherein the joint-facing implant surface is configured to oppose at least a portion of a weight-bearing tibial surface and a patella when the implant is implanted on a femoral condyle, and further wherein at least a first portion of the bone-facing implant surface has a three dimensional shape configured to substantially match the shape of an uncut articular surface that the implant abuts when the implant is implanted on the femoral condyle and at least a second portion of the bone-facing implant surface has a three dimensional shape configured to substantially match the shape of a cut surface that the implant abuts when the implant is implanted on the femoral condyle.